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(Australian Petty Patent)

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A BOLLARD AND SOCKET ASSEMBLY FOR USE AS A BARRIER TO VEHICULAR TRAFFIC
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- (56) Prior Art Documents
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- (57) Claim

A bollard and socket assembly for use as a barrier to vehicular traffic, said socket including a bore to receive and house an elongated bollard with coupling means to releasably retain the bollard in the socket bore, said coupling means comprising interengagable elements associated with the bollard and the socket bore which necessitate linear and then rotary movement of the bollard with respect to the socket in order to couple the bollard to the socket and reverse order movements in order to uncouple the bollard from the socket, and lockable retaining means to interconnect the socket and the bollard when it is mounted in the socket to thereby prevent rotary movement of the bollard relative to the socket.

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PETTY PATENT SPECIFICATION

(ORIGINAL)

TO BE COMPLETED BY APPLICANT

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This document contains the amendments made under Section 49 and is correct for printing

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Petty Patent Specification for the invention entitled:

A bollard and socket assembly for use as a barrier to vehicular traffic

The following statement is a full description of this invention, including the best method of performing it known to me:—

* Note: The description is to be typed in double spacing, pica type face, in an area not exceeding 250 mm in depth and 160 mm in width, on tough white paper of good quality and it is to be inserted inside this form.



This invention relates to thoroughfare barriers. The invention has particular application as a barrier to prevent vehicle access to a restricted area.

The invention can be broadly said to comprise a bollard and socket assembly for use as a barrier to vehicular traffic, said socket including a bore to receive and house an elongated bollard with coupling means to releasably retain the bollard in the socket bore, said coupling means comprising interengagable elements associated with the bollard and the socket bore which necessitate linear and then rotary movement of the bollard with respect to the socket in order to couple the bollard to the socket and reverse order movements in order to uncouple the bollard from the socket, and lockable retaining means to interconnect the socket and the bollard when it is mounted in the socket to thereby prevent rotary movement of the bollard relative to the socket.

A presently preferred embodiment of the invention will now be described with reference to the accompanying drawings in which:

Fig. 1 is an exploded perspective view of the components of the barrier and

Fig. 2 is a sectional elevation of the barrier of Fig. 1.

As illustrated the barrier comprises a socket member 1 and a bollard 2. The socket member 1 comprises a sleeve 3 with a



flange 4 at one end and a closure 5 at the other end. There is a drainage hole 6 in the end 5.

Internally the sleeve 3 includes a track (or tracks) to form one part of a bayonet type connection between the bollard and the sleeve. The track includes an axial groove 7 with a circumferential extension 8.

The flange 4 includes holes 9 whereby the socket 1 can be fixed to a base with the sleeve below the base surface, for example a concrete driveway. Around the open end of the sleeve 3 and extending into the flange 4 there is a shallow counterbore 10 to receive a cover 11 coupled by a leg 12 to a pin means 13 which allow the cover 11 to be raised and moved out of alignment with the sleeve bore. A stop means (not shown) is preferably provided to allow limited pivotal movement of the cover 11 in one direction to expose the sleeve bore. There is a slot 29 in the counterbore zone for a purpose to be described. The position of the slot 29 around the counterbore surface is not important but the distance of the slot from the central axis of the sleeve 3 is a fixed dimension.

The bollard 2 has a tubular body 14 with a cap 15 at one (the upper) end. The other end can be closed if desired but as illustrated the lower end of the bollard 2 is open.

There is one or more pegs 25 fixed to the bollard, depending upon the number of tracks, whereby the bollard is securable in the sleeve 3. In the illustrated example there are two tracks and two pegs 25. A latch means 16 including a lockable slide bolt assembly 17 is fixed to the body 14 through a saddle member 18 in the form of a channel and lugs. There is a slot 19 in the bollard wall of width and length to allow the channel lugs to be inserted in a particular manner. First the longer lug 20 is introduced into the slot 19 in a downward angled manner and it can move in that direction just sufficient to allow the shorter lug 21 to enter the slot 19. The channel is then raised to engage the shorter lug 21 behind the bollard wall adjacent the upper end of the slot 19. When in this position two threaded holes 22 in the longer lug 20 are aligned with two holes 23 in the bollard wall allowing two screws 24 to be applied to hold the saddle in place.

It will be noted that the positioning of the pegs 25 is such that when the bollard is secured in the sleeve 3 the screws 24 are not accessible for removal thereby adding to the security achievable with the device.

The bolt assembly 17 is fixed to the saddle by rearwardly entering screws 26 and includes a slide bolt 27 housed in a sleeve 28 with an associated key operated locking arrangement, which can be of the known pin or lug type.

When the bolt 27 is extended, with the bollard in the sleeve, the bolt enters the slot 29 to complete the locking arrangement.

It will thus be seen that the locking arrangement comprises a latching means, the peg(s) in the track part(s) 8, to prevent the bollard from being raised and a retaining means, the bolt 27 in the slot 29, which prevents the bollard being rotated to disengage the peg(s) from the track part(s) 8.

The foregoing is a description of a preferred form of the invention and it is to be understood that variations can be made to the described arrangement without departing from the inventive concept. For example, the bayonet connection could be formed by one or more slots each with axial and circumferential parts formed in the bollard wall and a corresponding numbers of pegs projecting into the bore of the sleeve.

The claim defining the invention is as follows:

A bollard and socket assembly for use as a barrier to vehicular traffic, said socket including a bore to receive and house an elongated bollard with coupling means to releasably retain the bollard in the socket bore, said coupling means comprising interengagable elements associated with the bollard and the socket bore which necessitate linear and then rotary movement of the bollard with respect to the socket in order to couple the bollard to the socket and reverse order movements in order to uncouple the bollard from the socket, and lockable retaining means to interconnect the socket and the bollard when it is mounted in the socket to thereby prevent rotary movement of the bollard relative to the socket.

Dated this 11th day of January 1991

DAVID JOHN BARRATT
By his Patent Attorneys
HALLIDAYS



64518/90

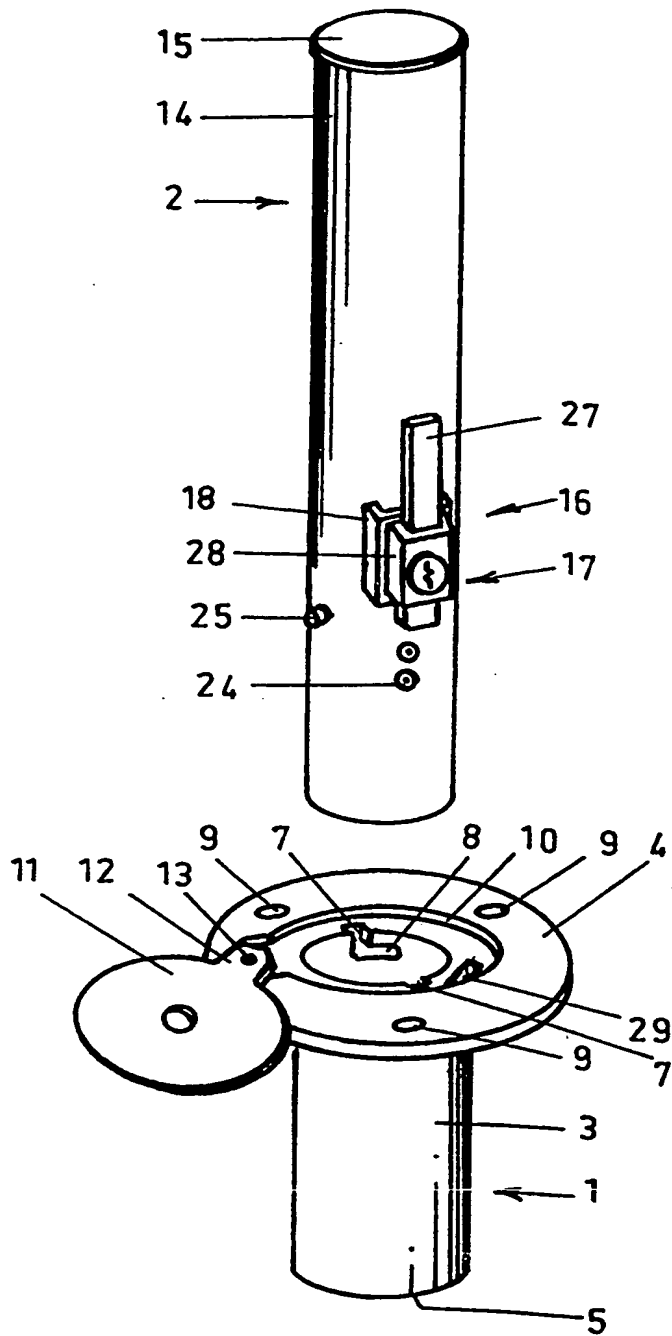
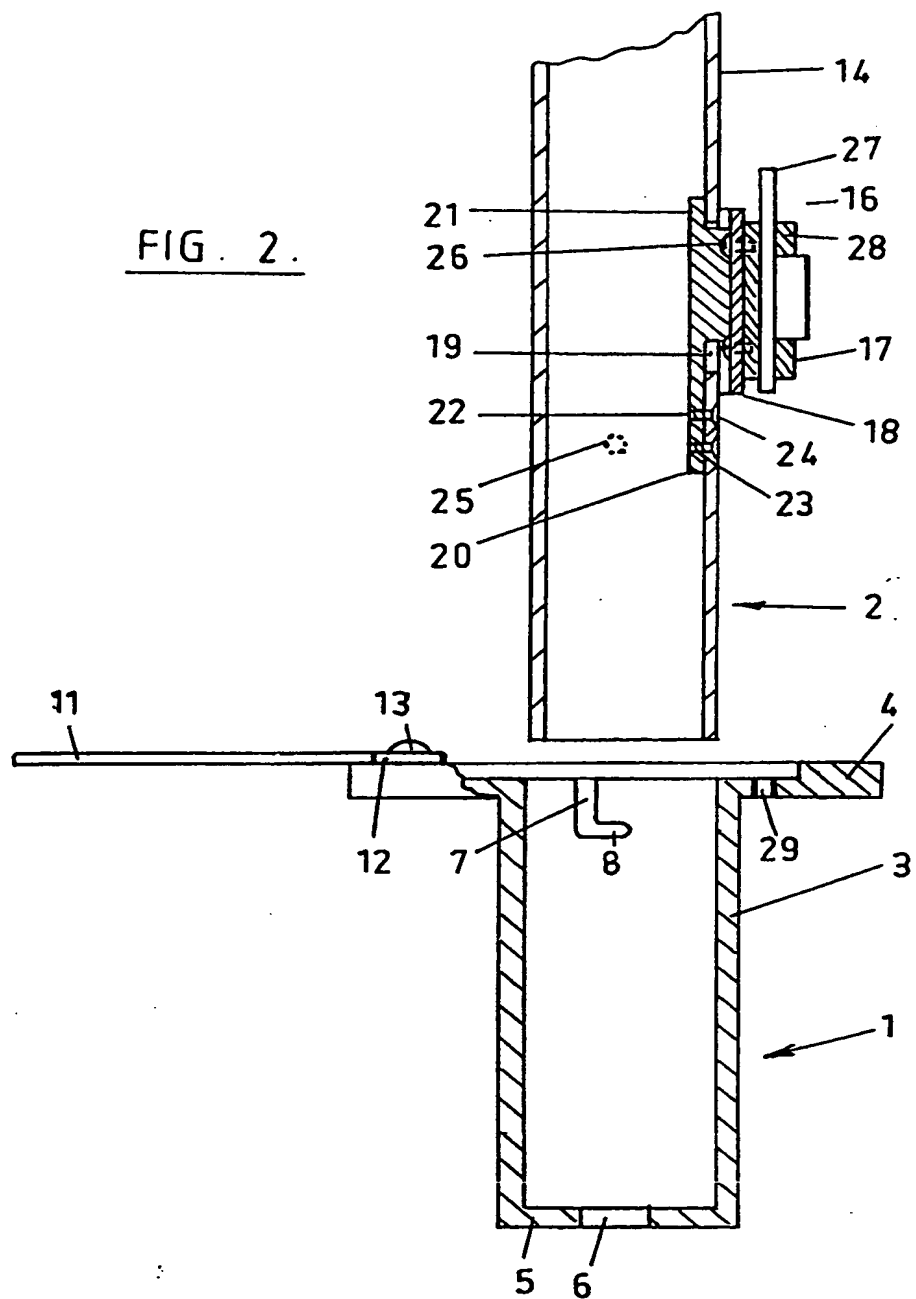


FIG. 2.



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